

FIGHTING WITHOUT BOUNDARIES:

Unleashing Initiative on the Tactical Battlefield

A Monograph
By
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Infantry



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Abstract

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This monograph examines how the U.S. Army can restructure the decision making process to release initiative on the battlefield. Army tactical units execute missions on a chaotic, uncertain, and disorderly battlefield. Leaders' actions are guided by a doctrine which is authoritative, requires judgment in application, and when understood and accepted, provides a common framework to think, train, plan, and operate in this uncertain environment. Within Army doctrine, initiative is considered a fundamental characteristic of successful operations.

This monograph first examines what is written in Army manuals about initiative, the decision making process, and the combat orders which articulate the intentions of the superior commander to subordinate leaders. Second, the doctrine is analyzed from a variety of perspectives ranging from complexity theory to the construction of social reality. Next, the previous discussions are illustrated with the actions of the 37th Tank Battalion from 24 December to 27 December 1944 during the Ardennes counteroffensive.

Finally, this monograph shows that a common purpose must be more fully and completely embedded in the decision making process and the resulting combat orders. Common purpose is the unifying element freeing initiative because a purpose eliminates a list of tasks. This monograph demonstrates the only reliable method of securing intelligent and adaptive initiative is through the enunciation of a common purpose.

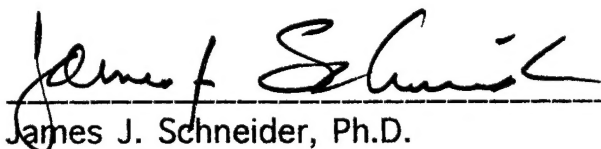
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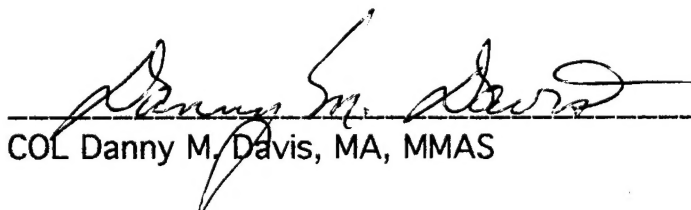
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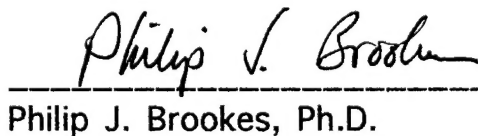
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I. Introduction

Drawing on the ideas of early twentieth century thinkers, John Boyd concludes a rigid or closed system inevitably leads to disorder and chaos.¹ Disorder and chaos unstructure systems and allow for a restructuring of constituent parts into a new system. If the new system is compared to, and against, reality, the constituent parts not fitting can be discarded and constituent parts more closely fitting reality can be assembled. The new concept satisfies the need for order and prevents the march toward randomness, uncertainty, and chaos.

Boyd's approach serves as a guide to answer this paper's research question: How can the U.S. Army restructure the tactical decision making process to release initiative on the battlefield? Doctrine is the product of the Army's experience in the chaos and disorder of conflict. This paper will compare what the Army has institutionally created from the disorder and chaos of conflict to the Army's experience in war. From this comparison, the paper will answer the research question; thereby assembling a new concept of tactical decision making from the constituent parts of the Army's experience.

The U.S. Army has a doctrine that stresses initiative on the battlefield.² This doctrine is the Army's mental model allowing soldiers to forecast and anticipate events on the battlefield.³ Experience in war is precious; people are killed and maimed and national treasure is expended as the Army acquires this experience. Thus, the Army as an institution recognizes the value of this experience. Yet, soldiers do not uniformly accept the Army's doctrinal mental model.⁴

J.F.C. Fuller wrote some years ago that the objective is gained when the intention is fulfilled, since the object is the intention.⁵ This idea of intent would meet with approval from General William E. DePuy, but it is at odds with the Army's current doctrine on commander's intent.⁶ A recent U.S. Army Command and General Staff College White Paper states that commander's intent fosters initiative and agility, transmits the superior commander's vision, facilitates coordinated action, defines the purpose of the operation, specifies acceptable risk, and describes the end state the force will achieve.⁷ The doctrine implies that commander's intent frees initiative on the battlefield. This paper will demonstrate commander's intent is no longer useful to the tactical commander in

freeing the initiative of subordinates on the battlefield, because commander's intent does not convey adequately a sense of common purpose.

So, over the following pages this paper will pursue other ideas for releasing subordinate initiative on the battlefield, ideas that move beyond the intent of the commander. This paper will use the logic of induction to assemble the constituent parts of vicarious experience into a general idea about the tactical decision making process and its relation to initiative on the battlefield.⁸ As Boyd points out, the act of thinking from the specific to the general is related to synthesis and integration.⁹ His approach lends itself to probing the idea of initiative on the battlefield.

This paper will use three questions to argue the research question from the specific to the general. First, how would a shift in the focus of mission analysis from the discovery of specified, implied, and essential tasks to the discovery of a unit's purpose allow for greater subordinate initiative? Second, where in the decision making process should analysis of the unit's purpose occur to determine the unit's role in relation to the higher commander and fellow subordinate commanders? Finally, how important is the

horizontal linking of purposes in achieving synchronization? The answers to these questions will support conclusions about initiative and its relation to the tactical decision making process, especially as it relates to commander's intent.

II. The Conventional Wisdom

Joint service publications and U.S. Army manuals provide military leaders with doctrine, tactics, techniques, and procedures. These manuals distill the insights and wisdom gathered over the years from the military's collective experience in war.¹⁰ The doctrine articulated in these manuals is authoritative, requires judgment in application, and when understood and accepted, provides a common framework to think, train, plan, and operate in war.¹¹ This paper will begin by searching for an answer to initiative on the battlefield by examining what is written in these manuals.

Initiative is one of the Army's five basic tenets. Initiative is considered fundamental to Army operations and a characteristic of successful operations.¹²

"Initiative sets or changes the terms of battle by action and implies an offensive spirit in the conduct of all operations. Applied to the force as a whole, initiative requires a constant effort to force the enemy to conform to

commanders' operational purposes and tempos, while retaining freedom of action. It means depleting the enemy's options, while still having options of their own. This requires leaders to anticipate events on the battlefield so that they and their units can act and react faster than the enemy. Applied to individual soldiers and leaders, initiative requires a willingness and ability to act independently within the framework of the higher commander's intent."¹³

To foster initiative, the authority to make decisions should extend to the lowest practicable level of command.¹⁴

Initiative would seem to underpin all that is in Army doctrine, and the discussion in FM 100-5 bears this out. Agility is a necessary condition for initiative; and knowing when to decide and acting without hesitation, a component of agility, is also implied in initiative.¹⁵ The tenet of depth contains the idea of shifting the main effort to take advantage of opportunities on the battlefield; again, this is a subset of the earlier discussion of initiative.¹⁶ Even synchronization, which may seem to be the enemy of initiative, in some, possibly tenuous, way secures initiative. Synchronization requires judgment in choosing between the effects of sequential and simultaneous battlefield activities; for this to occur there must be

a purpose for those effects and a will to act to create the desired effect at the desired place.¹⁷

U.S. Army manuals variously refer to the military decision making process¹⁸ as the deliberate decision making process,¹⁹ the combat decision making process,²⁰ and the quick decision making process.²¹ This paper will refer to all these as the tactical decision making process since the time available to make a decision determines which process is selected to arrive at a tactical solution to a problem. Whether the deliberate, combat, or quick decision making process is chosen, all the steps are performed; the difference between the types is the amount of time devoted to each step and who does what.

The tactical decision making process consists of essentially four steps: mission analysis, course of action development, course of action analysis, and the decision.²² These procedures are intended to promote a logical and methodical solution to the tactical problem. Army doctrine writers state that these procedures are flexible, comprehensive, continuous, and are focused on the future.²³

Mission analysis, the first step in the tactical decision making process, begins with an analysis of the intent of the immediate

higher commander and the commander two levels up. Next, the area of operations is analyzed along with the higher commander's concept of the operation and task organization. The third step is the identification of specified and implied tasks from the higher commander's order. This leads to step four, the listing of the specified and implied tasks essential to accomplishing the mission. Essential tasks are included in the restated mission. Step five is an analysis of the assets available to accomplish the mission. Next, limitations are identified. Limitations are any prohibition or tasking that limits the commander's freedom of action. The seventh step is the consideration of command and control warfare means available to the command. Step eight is an analysis of acceptable risk. Step nine is the determination of critical facts and assumptions that relate to mission accomplishment. Last, step ten is an analysis of time. Although this paper has listed these steps sequentially, some may occur simultaneously with others. The commander then receives a brief on the results of mission analysis and as a minimum approves the restated mission along with the command's essential tasks.²⁴

Following this briefing, the commander issues the planning guidance. The commander's guidance focuses the staff on the commander's vision of the future operation so they may develop courses of action. FM 101-5, Final Draft, lists nine elements that should be included in a commander's guidance to the staff.²⁵

Course of action development is the next step in the tactical decision making process. Courses of action must pass several tests. These tests are feasibility, acceptability, suitability, distinguishability, and completeness.²⁶ The operations officer generally conceives the course of action and the other staff officers link their battle operating systems to the maneuver course of action. A complete course of action addresses who will execute the operation; what type of operation, such as attack or defend; when the operation will begin; where the operation will occur, such as sectors, zones, and objectives; and how the maneuver units one level down will accomplish the operation.²⁷ The complete course of action is depicted with a sketch and accompanying narrative. Normally, several courses of action are developed for the staff to analyze.

This leads to the third step in the tactical decision making process, course of action analysis. Course of action analysis

essentially consists of two parts.²⁸ The first part, war-gaming, is a conscious attempt to visualize the flow of an operation given friendly strengths and dispositions, enemy assets and probable course of action, and a specific piece of terrain. The staff conducts the war-game and attempts to foresee the action, reaction, and counteraction of friendly and enemy forces during an operation. There are several rules, techniques, and methods for conducting war-gaming.²⁹ The second part of course of action analysis, comparison of courses of action, begins at the conclusion of the war-gaming. The goal in comparison of courses of action is to choose the course of action most likely to succeed against the enemy course of action that is of most concern to the commander. The staff may use various criteria and decision matrixes to aid them in their analysis.³⁰ However the staff compares the courses of action, the result is a discovery of the advantages and disadvantages of each course of action. The results are then provided to the commander for a decision.

The commander's decision is the fourth and final step of the tactical decision making process. The staff highlights the advantages and disadvantages of each course of action to the

commander. This leads to a recommendation by the staff to the commander on a particular course of action. The commander may agree or disagree with the staff's recommendation. Upon selecting a particular course of action, the commander refines the course of action with a statement of commander's intent, scheme of maneuver, and a decision on the necessary supporting fires for the operation.³¹ The commander also determines an acceptable level of risk, in consonance with the higher commander's intent. Last, the commander amplifies the intent statement and scheme of maneuver into a concept of the operation for the staff to develop into a combat order.³²

There are at least seven types of combat orders.³³ This paper will focus on a description of two types of combat orders: the operation order, and the mission order. These two types of orders are the ones most commonly used.³⁴

The operation order is generally used when deliberate execution is necessary, the enemy is capable of a strong reaction to friendly operations, time is available for planning, and when friendly units are unfamiliar with one another.³⁵ Operation orders have five paragraphs and convey the mission statement, the commander's

intent, concept of the operation, and instructions to subordinate units. The order specifies an execution time for the operation, allocates available resources through task organization and priorities, and graphically depicts control measures necessary to promote agility, initiative, and synchronization during execution.³⁶

The mission order is generally used when the situation is in flux, the enemy is incapable of a strong reaction to friendly operations, and when friendly units are familiar with one another.³⁷ Mission orders state what to do but not how to do it. As such, mission orders contain the task organization, the higher commander's mission and intent, the issuing commander's mission statement and intent, identify the main effort, and provide the minimum coordinating instructions necessary to create a synchronized effort at the decisive place on the battlefield.³⁸ Generally, commanders issue mission orders in person to their subordinates.³⁹

III. The Unconventional Wisdom

One view of U.S. Army doctrine is that it informs soldiers about war as a complex system, where a great many independent agents are interacting. These independent agents adapt to their

world by striving to turn their experiences to their advantage. The system they create operates on the "edge of chaos," a place where order and chaos constantly shift.⁴⁰ This is the best that can be expected on the battlefield. If everything is done right in the tactical decision making process the concept of the operation will lead to operating on the edge of chaos during execution. Small errors anywhere along the way will lead into chaos. "In nonlinear systems...chaos theory tells you that the slightest uncertainty in your knowledge of the initial conditions will often grow inexorably. After a while, your predictions are nonsense."⁴¹ Despite the idea the tactical decision making process promotes a logical and methodical solution to the tactical problem, knowledge will never be certain at the point of contact with the adversary.

When executing a superior commander's concept, tactical units are always tottering on the edge between order and chaos. The initiative of subordinates is what prevents the descent into chaos, because, according to complexity theory, initiative leads to self-organization.⁴² Subordinate initiative is central to making any plan work on the disorderly battlefield. Subordinate initiative must be taught. "In the cognitive realm...anything we call a 'skill' or

'expertise' is an implicit model - or more precisely, a huge interlocking set of standard operating procedures that have been inscribed on the nervous system and refined by years of experience."⁴³ Cognition is implicit in what the Army wants from initiative on the battlefield. Awareness and judgment are essential to a subordinate acting within the commander's concept. "...[I]n cognition...the agents are individual minds, the feedback comes from teachers and direct experience, and the improvement is called learning."⁴⁴ Initiative on the battlefield, within the context of a common purpose assigned in the commander's concept, parallels this idea of adaptive agents.

As subordinates change tasks during the execution of an operation to meet changing and unforeseen conditions, they are essentially employing feedback and learning. "Learning was as fundamental to cognition as evolution was to biology. And that meant that learning had to be built into the cognitive architecture from the beginning, not slapped on at the end."⁴⁵ The implication of this applied to Army doctrine is that commanders cannot expect initiative to appear on the battlefield if they do not embed the concept in the tactical decision making process, and hence in the

combat orders. We can also embed initiative through garrison work habits. Frequently leaders tell subordinates to provide a five person fatigue detail for two days, or provide a company with three trucks. Leaders would go a long way toward embedding initiative if, during the everyday business of garrison life, they gave subordinates the mission and let them figure out the number of people or number of trucks necessary.

The possibility of a multi-echelon approach to freeing initiative in subordinates is beginning to emerge. From the time a leader arrives in the unit, leaders must demand initiative in even the mundane garrison activities. Initiative must be embedded through the tactical decision making process; combat orders must enunciate a common purpose to enable subordinate initiative. In brief, everything done is an endeavor to create a mental model in subordinates embodying a will to act within a common purpose. "Mental models are deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action. Very often, we are not consciously aware of our mental models or the effects they have on our behavior."⁴⁶ Initiative should pervade every aspect of the

organization. "When placed in the same system, people, however different, tend to produce the same results."⁴⁷ Thus the goal is to eliminate the cognitive dissonance between the belief in initiative on the battlefield and the attitude toward the routine and regimentation of garrison life and the training environment.⁴⁸ Commanders cannot expect initiative on the battlefield when they have a task oriented tactical decision making process, a task oriented training regime, and task oriented fatigue details.

A corollary to this idea is one of exposing subordinates of different abilities, or levels of experience, to a variety of situations so that they might observe and orient themselves to a variety of changing situations.⁴⁹ By repeatedly exposing subordinates to the same variety of situations, bonds of implicit communication and trust can be created. Creating these implicit bonds is an evolutionary consequence of sharing the same variety of experiences the same way. Moreover, they may commit to memory shared mental images of their experiences. Commanders can begin to inculcate this implicit communication and trust among subordinates in training.⁵⁰ For example, during situational training exercises (STX) one company commander would perform as the main effort, one

company commander would perform as a supporting effort directly contributing to the main effort's success, and another company commander would perform as a supporting effort indirectly supporting the main effort by creating a necessary condition on the battlefield for the main effort's success. Through the course of the training, each company commander would perform as the main effort, the supporting effort directly contributing to the main effort's success, and the supporting effort indirectly contributing to the main effort's success. Each company commander would have the opportunity to experience the unique contribution each mission makes in accomplishing the superior commander's concept. Through this training experience of one commander supporting the other, subordinates can build the implicit communication, trust, and shared mental image necessary to cooperate on the battlefield.

An idea related to mental models is orientation. "Orientation, seen as a result, represents images, views, or impressions of the world shaped by genetic heritage, cultural tradition, previous experiences, and unfolding circumstances."⁵¹ The commander and the staff have an orientation when they begin to solve the tactical problem at hand. To a certain extent, their orientation will belie the

external world as their subordinates will find it during the execution of the plan. Orientation is what makes the battlefield so uncertain. Not knowing precisely how or where the adversary will react to friendly actions will demand a change in friendly orientation from the one in the minds of the superior commander and staff when they conceived the concept of the operation.

"Orientation is the *schwerpunkt*. It shapes the way we interact with the environment - hence orientation shapes the way we observe, the way we decide, the way we act."⁵² The tactical decision making process refines the commander's orientation toward the tactical problem. In this regard, the commander should orient subordinates horizontally to one another, not simply orient them up or down the command hierarchy. Thus, the superior commander provides a collective orientation for subordinates to resolve what cannot be known exactly about the battlefield environment.

Correlating the ideas of mental models and orientation, another view of initiative emerges; that of implicit communication and trust between the subordinate and superior, and among the subordinates. Without creating implicit connections and the associated mental models among subordinates, they cannot realize

the necessary individual initiative within the collective entity that is the organization and the plan.⁵³ The leaders and soldiers comprising the organic whole of the unit and the concept of the operation must be able to stay together and cope with the many uncertainties of an everchanging environment. The consequence of not creating implicit bonds and the associated mental models in the organic whole is a magnification of friction, ultimately producing paralysis and collapsing the scheme. The tactical decision making process has to create within the organic whole the ability to implicitly communicate in the particular external environment in which the soldiers will fight. A commander does this by devising the connections of purpose among all the subordinates to create a common purpose within the organic whole.

The tactical decision making process has the tendency to promote explicit internal arrangements that hinder interaction with the external world.⁵⁴ Foremost among these explicit internal arrangements is commander's intent. According to FM 101-5, Final Draft, the tactical decision making process begins by examining the higher commander's intent during mission analysis.⁵⁵ The process concludes with the commander amplifying the intent statement

because of the decision on a course of action, and then this intent statement is placed in the combat order.⁵⁶ Rather, leaders should create a concept of the operation that arranges the connections of subordinate purposes within an enunciated common purpose, allowing all subordinates to continuously interact with each other and the external world. A commander should enable subordinates to create similar images, and hence a similar implicit orientation for the organization as a whole. When leaders speak to one another mainly in terms of commander's intent, they are beginning to remove themselves from the external world.⁵⁷ The fidelity to which subordinates execute the concept of the operation will depend largely upon how closely the concept resembles the external world. The more leaders insulate themselves from the external world through explicit internal arrangements the more likely they will execute something other than their concept, whether they want to or not.

For any given mission, initiative should be built into the solution during the tactical decision making process through a uniformly understood common purpose. The aim of the tactical decision making process is to create a scheme with "Internal

simplicity that permits rapid adaptability.”⁵⁸ The genesis of this creation is understanding the command’s unique and common purpose and how the unique purpose fits vertically and horizontally in the higher commander’s concept.⁵⁹ Orienting the commander and staff to the command’s unique and common purpose should be done during the mission analysis step of the tactical decision making process.⁶⁰

Still another way of viewing this issue is through the idea of collective intentionality. “The crucial element in collective intentionality is a sense of doing (wanting, believing, etc.) something together, and the individual intentionality that each person has is derived from the collective intentionality that they share.”⁶¹ In other words, I am doing something only as a part of our doing something. Commander’s intent degrades this process since a commander’s singular intention does not add up to a sense of collectivity among the subordinates. Commander’s intent attempts to reduce collective intentionality to individual intentionality. John Searle writes that the collective intentionality that exists in each individual’s mind is in the form “we intend,” as opposed to the form “I intend and I believe that you believe that...”⁶² Again the idea is presented that each soldier acts within a collective concept that is

shared through a common purpose. Commander's intent does not equal common purpose. The idea of collective intentionality suggests that the sum of subordinate purposes, the common purpose, is serving the doctrinal function ascribed to intent.

General DePuy brings a practical view to this idea of initiative, but one not incongruent with the preceding writers. "Departing for a moment from the classic view of corps, divisions, brigades and such, the Army actually consists of parallel, vertically integrated and individually controlled functional systems. For the purposes of execution they are echeloned vertically. For the purposes of synchronization, they are sliced horizontally at the level of each major tactical and operational echelon. Because maneuver is the key to which all functions relate, those horizontal slices are the familiar armies, corps, divisions, brigades, battalions, companies and elements of the maneuver force."⁶³ This means that a commander should construct a mental model for the subordinates to act within the vertical and horizontal planes the higher commander has created within the concept of the operation. This implies a shift in the focus of mission analysis from the discovery of specified, implied, and essential tasks to the discovery of the unit's

unique contribution to the higher commander's concept. The analysis must converge on the unique contribution, or purpose, vertically and horizontally to determine the command's role in relation to the higher commander and to fellow subordinate commanders.⁶⁴

This paper uses the words vertical and horizontal to describe the nesting of purposes within the commander's concept.⁶⁵ The relation of the main effort to the higher headquarters' main effort is the vertical nesting of purpose. The relation of the supporting effort to another supporting effort or the higher headquarters' main effort is the horizontal nesting of purpose. Suppose there is only one main effort at any one time in an operation, then approximately seventy-five percent of the maneuver forces' purpose is not linked vertically within the commander's concept. These supporting efforts are linked by purpose horizontally since they are directly assisting the main effort or indirectly creating a necessary condition on the battlefield for the main effort's success.

Vertical functions are real systems. For example, the forward observer inputs information about a target, the fire direction center processes the information into firing data, and the firing battery outputs a volley of shells toward the target.⁶⁶ The impetus to act

within one's vertical system is great. These systems frequently have their sensors and communications, such as the target acquisition radars and digital quick fire nets. When leaders tell everyone they must understand the superior commander's intent they reinforce this notion of vertical integration.

The difficult part of fighting is synchronizing these vertical functions to concentrate the effects of combat power.⁶⁷ To be synchronous with fellow commanders, a commander must understand the unit's unique contribution to the higher commander's concept of operations. A subordinate commander's purpose provides the mental orientation to remain synchronous within the superior commander's concept of the operation. Thus, synchronization cannot be predicated solely on meticulous procedures to arrive at and implement tactical decisions.

S.L.A. Marshall illuminates this idea when he discusses the effect of fire on an opponent applied at the correct place by a small force.⁶⁸ The decision making process can lengthen the decision cycle to the extent commanders are unable to take advantage of an opportunity for action. In the desire to account for all the combat multipliers in a synchronized fashion commanders lose the

possibility of placing fire from an advantageous position by a portion of the force. For example, in open maneuver warfare, the key is not to concentrate thirty tanks. The likely result is either target overkill or a failure to protect oneself. The key is to develop a concept that will get four to eight tanks on the adversary's flank with nothing to worry about other than destroying the enemy. Eight M1A1 tanks with seventeen rounds in the ready rack potentially equal 136 targets destroyed. That is an entire brigade or regiment of combat vehicles.

As General DePuy points out:

"It has long been clear that an absolute prerequisite for the effective employment of a force is a clear, simple commander's concept of the operation. Based on this concept, which features his 'scheme of maneuver,' all the functional commanders can plan and execute their part of the battle.

In the event of surprises, errors and other inevitable misfortunes such as communications failures, each subordinate can act as he believes the force commander would act were he present. The subordinates can act through his understanding of the larger concept. Without such knowledge he must wait for orders. This, of course, is the essence of the German *Auftrags Taktik* (that is, mission-type-orders) -

continuous, intelligent and adaptive
synchronization.”⁶⁹

A common dictionary definition of initiative is to act at one's own discretion, independently of outside influence or control. However, in this sense, initiative is remaining in synchronous action with fellow commanders despite the inescapable friction of the battlefield. Initiative will be a part of every operation. Radically changed circumstances on the battlefield are not the only province of initiative. The more common use of initiative by subordinates is when they maintain harmonious action in spite of the changed circumstances found during execution of the commander's planned concept of the operation.

As General DePuy mentions in the preceding quotation, mission orders seem to be suited for conveying a commander's concept.⁷⁰ Mission orders express the purpose of the operation together with the tactical task. This paper's analysis indicates that the purpose must take precedence over the task. J.F.C. Fuller writes that, “In affairs between men, such as war, economy of force demands that force should be directed with a purpose, since rationally it cannot be directed by necessity - there must be a reason for its expenditure.”⁷¹ This idea succinctly explains why leaders should

discover the higher commander's purpose, their own purpose, adjacent unit purposes, and fellow subordinate commanders' purposes during mission analysis. The initiative of subordinates is dissipated when commanders cannot articulate an interlocking scheme of purposes.

Solely discovering essential tasks during mission analysis does not explain the unit's purpose within the commander's concept. Simply analyzing the higher commander's intent statement does not allow a leader to understand the unit's purpose in relation to fellow commanders or adjacent units; possibly not even to the higher commander if the unit is not the main effort. A leader should discover the unit's purpose during mission analysis since the purpose is the unit's unique contribution to the higher commander's concept. The purpose will permeate everything else the leader does in the tactical decision making process. Through a leader's understanding of the unit's purpose, the leader will derive the concept of the operation. Purpose is what embeds initiative in the order the leader issues. Furthermore, mission orders synchronize combat power by integrating subordinate purposes within the concept of the operation.

IV. Vicarious Experience

Over the next several pages this paper will illustrate the preceding ideas through the actions of the 37th Tank Battalion during the relief of BASTOGNE in December 1944. The 37th Tank Battalion was an organic unit of the 4th Armored Division and had fought with the Division since the Allied landings in France in June 1944. This action is not this unit's baptism to fire. In fact, only a well trained organization is capable of freeing initiative to cope with the confusion of battle. Last, although separated by fifty-one years from this action, the doctrine the leaders of the 37th Tank Battalion operated within is remarkably similar to what is current in the U.S. Army today.⁷²

On 18 December 1944 the 4th Armored Division received an alert order to move 150 miles from LORRAINE to the ARDENNES.⁷³ The 4th Armored division was in XII Corps reserve after a month of heavy fighting in the LORRAINE campaign.⁷⁴ The Division move was precipitated by the German counteroffensive in the vicinity of the ARDENNES. The Third Army Commander envisioned a three division attack by III Corps to relieve the 101st Airborne Division encircled by the Germans in BASTOGNE.⁷⁵ The 4th Armored Division was to

attack North on the left (West) flank of III Corps, with the 26th Infantry Division attacking in the center, and the 80th Infantry Division attacking on the III Corps right (East) flank.⁷⁶ Eventually, the 80th Infantry Division was detached from III Corps, which then widened the zone of the 26th Infantry Division, ultimately leading to the 4th Armored Division's attack toward BASTOGNE with both flanks exposed.⁷⁷

The fighting strength of the 4th Armored Division was organized around three combat commands: Combat Command A (CCA), Combat Command B (CCB), and Combat Command Reserve (CCR).⁷⁸ Each combat command had a tank battalion, an armored infantry battalion, an artillery battalion, and combat support and combat service support units task organized.⁷⁹ The 4th Armored Division principally used CCA and CCB for tactical missions, with CCR forming the Division's reserve. The operations around BASTOGNE were only the second time the 4th Armored Division had used CCR as a tactical command.⁸⁰

Since the 4th Armored Division's move on 19-20 December 1944, the 37th Tank Battalion was organized under CCR. On the morning of 24 December 1944, the 37th Tank Battalion took part in

an action in the vicinity of BIGONVILLE on the eastern flank of the Division zone to block a possible German counterattack into the flank of CCA.⁸¹ In the evening of 24 December 1944, the 4th Armored Division issued an order changing CCR's zone, and hence that of the 37th Tank Battalion, to the western flank of the Division.⁸² The 37th Tank Battalion began to move from the vicinity of BIGONVILLE at 250100 December 1944 and arrived in an assembly area near the town of BERCHEUX at 250500 December 1944.⁸³

The 4th Armored Division's mission remained unchanged; its common purpose being the relief of the encircled 101st Airborne Division near BASTOGNE.⁸⁴ CCR however, had been committed to an attack on the Division's western flank with the purpose of protecting the left (West) flank of CCB.⁸⁵ At 1100 hours on 25 December, the 37th Tank Battalion began its attack with the 53d Armored Infantry Battalion, C Battery of the 704th Tank Destroyer Battalion and the 94th Field Artillery Battalion firing in direct support.⁸⁶ Essentially attacking astride a road running generally to the Northeast, the small villages were used as objectives. The formation moved through the first village, VAUX-LES-ROSIERES, meeting only light resistance from 10 to 12 German infantrymen.

Approximately two kilometers to the North, D Company 37th Tank Battalion (D/37) moved through the village of PETITE ROSIERE, firing their machine guns to suppress the defending enemy. C Battery 704th Tank Destroyer Battalion (C/704 TD) and B Company 53d Armored Infantry Battalion (B/53) followed D/37 into the village. D/37 and C/704 TD moved North of the village to high ground and occupied an outpost, oriented to the northwest. By orienting D/37 and C/704 TD to the Northwest of the village, the 37th Tank Battalion Commander, LTC Creighton W. Abrams, was operating within his assigned purpose of protecting CCB's West flank. B/53 began to clear the village of enemy soldiers, taking 34 prisoners in approximately two and a half hours of fighting.

While B/53 was clearing the enemy from PETITE ROSIERE, A Company 37 Tank Battalion (A/37) and A Company 53d Armored Infantry Battalion (A/53) moved through the village and turned West to attack through the village of NIVES. Attacking down the main street of the village, A/37 and A/53 met only sporadic resistance and cleared NIVES by 1400 hours, about the same time B/53 completed clearing the village of PETITE ROSIERE.

C Company 37th Tank Battalion (C/37) and C Company 53d Armored Infantry Battalion (C/53) passed through NIVES about 1400 hours and assaulted through the next village, COBREVILLE, about one kilometer distant. The only real impediment to this assault was a blown bridge southeast of the village, which the bulldozer traveling with the 37th Tank Battalion headquarters was called for by radio to render assistance. By 1515 the bulldozer had pushed enough rock fill into the creek for C/37 and C/53 to continue their advance. C/37 and C/53 moved toward the village of REMONVILLE, halting about 1000 meters West of the village on the high ground.

Supported by the direct fires of C/37 and an artillery concentration on the village, A/37 and A/53 assaulted directly into the village of REMONVILLE. The defending German infantry battalion did not return fire while under the supporting direct and indirect fires until A/37 and A/53 were well into the village. A/53 began clearing the enemy house by house in the center of the village. While A/37 and A/53 were fighting in the center of REMONVILLE, C/37 and C/53 moved off the high ground West of the village and began to clear the western side of REMONVILLE. The speed of the assault prevented the German infantry from making good use of their

supporting strongpoints, although two tanks were hit by anti-tank fire. During the fighting in REMONVILLE, B/37 moved to Hill 480 northwest of the village to cover the approaches from the village of REMICHAMPAGNE, about three kilometers distant. By 1700 hours resistance in REMONVILLE ceased, leaving 35 enemy dead and 327 enemy prisoners.⁸⁷

A/37 relieved B/37 on Hill 480 about 1800 hours, and C/37 moved North to cover the approach into REMONVILLE from the North. A crater in the road leading North out of REMONVILLE at a judicious location precluded further movement North that night. Units remained in their positions over the night of 25 December 1944.⁸⁸

At 0930 hours on 26 December the 37th Tank Battalion began to move toward the village of REMICHAMPAGNE. B/37 and B/53 moved cross country to the East of the road to assault REMICHAMPAGNE, while C/37 and C/53 moved West of the road prepared to support by fire the assault of B/37 and B/53. Soon after the 37th Tank Battalion began moving, sixteen P-47 fighter planes bombed and strafed REMICHAMPAGNE and the surrounding woods.⁸⁹ Assaulting immediately after the airstrike, B/37 and B/53 met only

light resistance in REMICHAMPAGNE, with the few defenders still dazed from the bombing.

While B/53 continued to clear the village of REMICHAMPAGNE, B/37 moved about 1500 meters northeast of the village to a position overlooking CLOCHIMONT. B/53 soon joined B/37. C/37 and C/53 moved one kilometer North of REMICHAMPAGNE to guard against a threat from the woods to the northwest. A/37 moved to the West of CLOCHIMONT to cover the avenues of approach leading from the villages of SIBRET and VILLEROUX. By the time the forces occupied these positions it was 1500 hours. Again, the disposition of the companies indicates LTC Abrams was operating within his assigned purpose of protecting the West flank of CCB.

About this time hundreds of C-47 cargo airplanes passed overhead enroute to drop supplies to the forces defending the BASTOGNE perimeter. Watching these airplanes fly overhead gave the commanders of the 37th Tank Battalion, LTC Abrams, and the 53d Armored Infantry Battalion, LTC Jacques, the idea to change their original task of seizing the village of SIBRET.⁹⁰ With BASTOGNE four kilometers distant, they decided to attack through to the BASTOGNE perimeter.⁹¹ They also considered that SIBRET was strongly held by

the Germans and their effective strength was only twenty tanks, while the 53d Armored Infantry Battalion was 230 men understrength.⁹² They did not ask for permission, nor did they immediately inform the CCR Commander, COL Blanchard.⁹³ However, in changing their task they did not deviate from their assigned purpose. The preponderance of their companies remained oriented on protecting the West flank of CCB. The significance of LTC Abrams' decision was that he was able to achieve his purpose of protecting CCB's West flank as well as achieve the common purpose of relieving the 101st Airborne Division.

At about 1520 hours, LTC Abrams sent a radio message to his operations officer (S-3), CPT Dwight, instructing him to bring C/37 and C/53 up to the positions of B/53. Within minutes of LTC Abrams radio message to his S-3, LTC Abrams also instructed his field artillery liaison officer (LNO), CPT Cook, to arrange to have all available Division artillery prepared to fire on order at the village of ASSENOIS.⁹⁴ Shortly after receiving LTC Abrams call, CPT Dwight arrived at B/37's position overlooking the town of CLOCHIMONT with C/37 and C/53. LTC Abrams issued the following orders to his commanders:

"C/37 and C/53 will march on ASSENOIS, go through it and continue on until contact is made with elements of the 101st Airborne Division. B/53 will follow and will clean out ASSENOIS. C/37 and C/53 will be under command of Captain Dwight and will be supported by three (3) Battalions of 105 and one (1) Battalion of 155mm artillery. Artillery will be on call from anyone in the force and be lifted by call. The artillery will hit the town of ASSENOIS and the edges of both woods to the N of ASSENOIS."⁹⁵

All the tank commanders and infantry platoon leaders were then briefed on the situation, and C/37 and C/53 began moving toward ASSENOIS at 1610 hours. Interestingly, LTC Abrams remained with the bulk of his forces protecting the CCB West flank, using his S-3 to command what amounted to an armor company team to breach the German positions in ASSENOIS. The speed of his decision cycle and his will to act allowed him to achieve his division commander's common purpose with a fraction of his force.

As the village of ASSENOIS came into view the C/37 Commander, 1LT Boggess operating from the lead tank, called for the artillery fire and kept on moving.⁹⁶ When 1LT Boggess' tank reached the edge of the village, he called for the artillery fire to be lifted,

and continued to move without waiting for the artillery fire to stop. With artillery rounds still impacting and smoke from burning buildings filling the air, C/37 and C/53 began to move through ASSENOIS. The defending German infantry battalion fired several anti-tank guns inaccurately and the German infantry remained under cover, enabling C/37 and C/53 to move well into the village before facing significant opposition from the defending Germans.⁹⁷

In the smoke, two tanks made a wrong turn near the center of ASSENOIS.⁹⁸ The continuing impact of artillery rounds in the village caused the majority of C/53's infantrymen to dismount their vehicles and seek cover.⁹⁹ Before the infantrymen could remount their half-tracks, they became engaged with the German infantry defending ASSENOIS. 1LT Boggess continued to move North toward the BASTOGNE perimeter with three tanks, while CPT Dwight followed 300 meters behind with two tanks and one half-track from C/53. Taking advantage of the 300 meter gap in the column, German infantry placed twelve Teller mines on the road the force was moving along.¹⁰⁰ The C/53 half-track detonated one of the mines and caught fire. Those infantrymen uninjured and CPT Dwight removed the mines from the road by hand while the machineguns from the two

tanks kept the German infantry suppressed. CPT Dwight then proceeded North along the road with his two tanks until he met 1LT Boggess and the remaining three tanks. 1LT Boggess had stopped when he made contact with an observation post occupied by soldiers from the 326th Airborne Engineer Battalion. This short action indicates the necessity of subordinates using their initiative to make even a simple scheme successful. Moreover, their use of initiative was entirely within the purpose assigned to them of continuing on until contact was made with elements of the 101st Airborne Division. At 1650 hours on 26 December 1944, CPT Dwight sent a radio transmission to LTC Abrams stating contact had been made with the 101st Airborne Division in the BASTOGNE perimeter.¹⁰¹

LTC Abrams then drove to the perimeter, bringing the two lost C/37 tanks and C/53 with him. B/53 remained engaged clearing the village of ASSENOIS. By 1830 hours C/37 and C/53 were integrated into the BASTOGNE perimeter's defense. At 1930 hours, LTC Abrams sent a radio transmission to LTC Jacques asking him to send A/53 to clear the woods on either side of the road, stretching from ASSENOIS to the perimeter, of German infantry.¹⁰² B/53 finished

clearing the village of ASSENOIS of German infantry at 2000 hours.¹⁰³ A/53 continued to fight the German infantry in the woods along the road North of ASSENOIS. The fighting was at short range, frequently with bayonets.

By 0100 hours on 27 December 1944, A/53 had cleared the road leading North from ASSENOIS to the BASTOGNE perimeter sufficiently for vehicles to pass in relative safety. Thirty-five Germans were killed and four were captured in the fighting along the road. Prior to dawn, D/37 led a convoy of seventy ambulances and forty supply trucks North along the road into the BASTOGNE perimeter.¹⁰⁴ A/37, A/53, B/37, and B/53 occupied outposts along the road leading to BASTOGNE until 29 December.¹⁰⁵ The remainder of CCR occupied positions within the BASTOGNE perimeter until 29 December 1944, when CCR went into reserve.

V. The Link

In a collection of essays entitled Envisioning Future Warfare, General Gordon R. Sullivan and Colonel James M. Dubik illustrate a time and command model of the decision cycle.¹⁰⁶ The authors suggest the technologies of the future will allow commanders unprecedented access to information about the enemy, their own

forces, and the physical environment of the battlefield. However, one cannot draw a strict cause and effect relationship between the technologies of the information age and the rapidity of a commander's decision cycle.¹⁰⁷ LTC Creighton Abrams' decision at the village of CLOCHIMONT at 1520 hours on 26 December 1944 to orient his attack from SIBRET to BASTOGNE, coordinate supporting artillery fires, reposition forces, issue an order, and then launch his attack at 1610 hours belies the argument that information age platforms and systems necessarily compress the decision cycle. Comprehension of the superior commander's common purpose was essential to LTC Abrams' short decision cycle on 26 December 1944.

Eliot Cohen and John Gooch enunciate the leitmotif of this paper's argument when they write, "Military organizations present us with special problems, for while on the one hand they are especially rigidly ordered and hierarchical, they are also designed to function in situations where chains of authority may break down or where higher direction may be temporarily intermittent or non-existent."¹⁰⁸ Initiative is the lubricating idea that allows units to function, but initiative must be ordered through a common purpose. Large opportunities, dramatic changes in the situation, or the

severing of communications are not the only environment requiring soldier initiative. The turbulence of the battlefield requires initiative to accomplish the simplest mission.

Understanding the unit's purpose up the command hierarchy and across the equivalent commands early in the tactical decision making process will focus what leaders choose to observe, what they decide, and how they act. Common purpose is important to leader orientation since it is the singular idea that will not change during the chaotic conduct of the mission. The exegeses of the battlefield environment may cause leaders to adapt their tactical task, but only insofar as it relates to their purpose.

The 37th Tank Battalion's action in the ARDENNES illustrates this point. While LTC Abrams' attack toward the BASTOGNE perimeter indicates he understood his higher commander's purpose in a vertical sense, relieving the forces inside the BASTOGNE perimeter, he also understood his purpose in a horizontal sense. LTC Abrams' orientation on 25 December and 26 December was to protect the West flank of Combat Command B. Three of his four tank companies and his single tank destroyer battery were arrayed to protect the western flank of Combat Command B during the attack to

rupture the German encirclement of BASTOGNE. Despite his reduced strength in combat vehicles and soldiers, he conducted an attack through a defending German infantry battalion with less than a third of his force. LTC Abrams changed his tactical task from seizing the village of SIBRET to breaching the German defenses in the village of ASSENOIS and clearing the road North to the BASTOGNE perimeter, yet the effect of his application of combat power was always consistent with protecting the western flank of Combat Command B.

A radical approach to structuring the tactical decision making process would infer that battlefield circumstances obviate the need for tactical tasks altogether. If a commander's orientation is so dissimilar during the tactical decision making process from what subordinates will experience on the battlefield, then a commander is handicapping their ability to adapt their orientation to the battlefield environment by specifying the tactical task. Why not simply assign them a purpose within the concept of the operation?

Pragmatically, there is some justification in assigning subordinate tactical tasks. Foremost among the reasons is the ability to task organize. If a commander envisions a subordinate seizing a piece of terrain, the force will be task organized

differently than if a subordinate is attacking by fire some portion of an enemy force. Nevertheless, a common purpose orientation among subordinates is more desirable than a task orientation. The goal is simplicity permitting rapid adaptability.

Regardless of how hasty the tactical decision making process becomes, the person developing the course of action must articulate a common purpose for each array of forces. Defining subordinate purposes must be done prior to selecting subordinate tasks, task organizing, or drawing maneuver control measures. There must be a reason for positioning a force in a particular location.¹⁰⁹ Moreover, the purpose for each subordinate must either create a necessary condition on the battlefield for the main effort's success, or directly support the main effort's success. Creating interlocking purposes among subordinates is the essence of the concept of the operation and scheme of maneuver. This is how the commander intends to fight. Defining subordinate purposes does more than tell them why they fight; their purpose integrates their fight with those around them.¹¹⁰

Initiative on the battlefield can be released with a common purpose orientation among commanders and leaders. Leaders should

embed this common purpose orientation in their orders through a mission analysis process focusing on the discovery of their unit's purpose within the superior commander's concept. We further our subordinates' purpose orientation by creating a scheme with interlocking subordinate purposes revolving around our main effort. After all, the apparent clearheadedness of the analysis during the tactical decision making process in the command post is likely to be nothing more than an ersatz view of the external world subordinates will encounter during execution on the battlefield.

The external environment of the battlefield will compel leaders to adapt the concept; to learn from the feedback they receive from each other, their opponent, and the physical landscape. Every subordinate commander and leader will observe, orient, decide, and act without the formalism of the tactical decision making process if the concept succeeds. Commanders do not want an automatic response. They should demand subordinate initiative since only the subordinates can observe and orient themselves to each other and the external environment with the immediacy necessary to reduce the chaos of the battlefield to a level which enables the superior commander's concept to succeed.

VI. Conclusion

The sum of what is written is not an argument for a collection of free agents on the battlefield. Rather this paper recognizes, as the nineteenth century military thinkers did, that chaos is a condition on the battlefield. The analysis indicates a way of operating within the chaotic environment. As this paper indicated in the opening chapter, John Boyd's approach to solving problems with inductive logic is useful. Initiative on the battlefield is really soldiers applying inductive reasoning within the superior commander's concept. Friction and uncertainty being present in any contest between two opponents possessing a will to fight, subordinates will generally observe only a small parcel of the events that transpire around them. To act within the superior commander's concept, they must restructure the concept of the operation to fit the battlefield reality and fit the actions of those around them.

There are several implications for the Army's tactical decision making process which flow from this. One implication is that purpose has primacy over tactical tasks. In fact, limitations placed upon subordinates are more important than tactical tasks,

since limitations place more control on subordinate freedom and limit their ability to adapt to the vagaries of the battlefield. The reason understanding the purpose, and formulating a scheme of subordinate purposes, is so important is that a purpose provides a subordinate the widest latitude to operate and adapt to the external world and still remain within the superior commander's concept. If conditions on the battlefield preclude any subordinate, and certainly the main effort, from accomplishing their purpose, then the superior commander must pause and issue a fragmentary order. On the other hand, tactical tasks are likely to change routinely with no significant effect on the concept of the operation if subordinates understand their purpose and are adapting to the battlefield realities. Thus, the focus for the commander and staff in mission analysis must be on uncovering their unique and common purpose within the higher commander's concept of the operation.

However, this is only part of the solution. A second implication of understanding the purpose is understanding the context subordinates make their unique contribution. This is not too difficult if the context is vertically within the concept of the operation, such as when a subordinate is the main effort. Then, their

purpose will relate directly to the purpose of the higher headquarters. The difficulty arises when a subordinate must consider their purpose within a horizontal context. Does their purpose directly support another organization; for example, in order to prevent an enemy company from massing direct fires on the breaching unit. Or does their purpose indirectly support another organization by creating a condition of the battlefield; for example, in order to cause the enemy commander to commit his main effort along an avenue of approach leading into the main effort. Leaders should always want to know adjacent and supporting unit purposes, even if they are outside the organization of the immediate higher headquarters. This implies that the friendly situation in paragraph one of the operations order must be written with adjacent unit missions so leaders can discern their purposes. Moreover, supporting units within the organization must have their functions defined by purpose. An artillery target must be expressed with a purpose; for example, fire target number 1001 in order to prevent enemy observed direct fire on the breaching unit. This is important for two reasons. It lets the breaching unit know not to breach until the artillery smoke is obscuring the enemy's ability to see the

breach site. And it lets the artillery unit understand when and where, at least in terms of range for smoke rounds, it needs to be in position to deliver fire to have the intended effect.

So much of what leaders do is within the context of understanding their unit's common purpose. Understanding the common purpose must be central to mission analysis. A unit's purpose must order the concept of the operation by connecting subordinates either directly or indirectly. All the functional systems within the organization must be connected by purpose to the maneuver function. On a chaotic battlefield this is the only reliable way to achieve synchronization. Articulating a common purpose is the only consistent method to secure intelligent, adaptive, initiative.

Endnotes

¹ John R. Boyd, "Destruction and Creation", [Photostat] Unpublished essay in my possession, 3 September 1976, 16.

² U.S. Army, FM 100-5: Operations (Washington: U.S. Government Printing Office, June 1993), 2-6.

³ Peter M. Senge, The Fifth Discipline: The Art and Practice of The Learning Organization (New York: Currency Doubleday, 1994), 8.

⁴ J.D. Johnson, "Mission Orders in the United States Army: Is the Doctrine Effective" (Masters thesis, U.S. Army Command and General Staff College, 1990), 100 - 101. "There were two major implications that resulted from this study: 1. The survey participants' lack of knowledge concerning mission orders may imply a more general lack of doctrinal knowledge. Since mission order depends on a common knowledge and understanding of doctrine, this is, potentially, a fatal flaw. This failing has been addressed in Combat Training Center lessons learned and deserves additional investigation. 2. For the most part, the survey participants had either recently completed instruction concerning the Army's command and control philosophy or are responsible to teach it themselves. This implies that their level of knowledge may have been greater than the general population of officers. The results of the 'Mission Order Survey' may not accurately reflect the officer corps' knowledge level. The general population may be worse."

⁵ J.F.C Fuller, The Foundations of the Science of War (London: Hutchinson & Co., circa 1925; repr., Fort Leavenworth, KS: Command and General Staff College Press, 1993), 327.

⁶ William E. DePuy, Selected Papers of General William E. DePuy, comp. Richard M. Swain, ed. Donald L. Gilmore and Carolyn D. Conway (Fort Leavenworth, KS: Combat Studies Institute, 1994), 423.

"Recently, the 'commander's intent' has been elevated to high status and , in the OPORD, inserted between the mission and the concept. The mission says what and the concept says how. What is left for the intent except heroic language? Examples of intent that try not to encroach on either mission or concept are pretty thin gruel. It has been said at Ft. Leavenworth, Kan., that the intent tells us why, but the answer as to why the first battalion is to seize hill 101 is (or should be) clearly contained in the concept of the brigade commander. Thus the concept is the vehicle which conveys the

intent, and the method as well - all in one neat classic package. It needs no further elaboration."

⁷ "Commander's Intent", White Paper (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 23 March 1995), 1.

⁸ Webster's New Collegiate Dictionary, 1977 ed., S.v. "Induction."

The act, process, or result or an instance of reasoning from a part to a whole, from particulars to generals, or from the individual to the universal.

⁹ John R. Boyd, "Destruction and Creation", 4.

¹⁰ Department of Defense, Joint Pub 1: Joint Warfare of the US Armed Forces (Washington: U.S. Government Printing Office, 11 November 1991), 5.

¹¹ *Ibid.*, 6.

¹² U.S. Army, FM 100-5: Operations, 1993, 2-6.

¹³ *Ibid.*

¹⁴ *Ibid.* An effective method for doing this is to embed initiative in the operations order by telling subordinates what to do, where to do it, when to do it, and why to do it; leaving the how to subordinate commanders.

¹⁵ *Ibid.*, 2-7.

¹⁶ *Ibid.*, 2-8.

¹⁷ *Ibid.*, 2-9.

¹⁸ U.S. Army, FM 101-5: Staff Organization and Operations (Washington: U.S. Government Printing Office, May 1994), 5-4.

¹⁹ U.S. Army, FM 101-5: Command and Control for Commanders and Staff, Final Draft (Fort Leavenworth, KS: n.p., July 1993), 4-7.

²⁰ *Ibid.*, 4-41.

²¹ *Ibid.*, 4-52.

²² *Ibid.*, 4-2. The May 1984 edition of FM 101-5, which is the current signed field manual, lists a ten step process from mission received to mission accomplished on page 5-6. I believe commander's guidance is a step in the process between mission analysis and course of action development, and issue the order is a step in the process coming after the decision.

²³ *Ibid.*, 4-2 - 4-3.

²⁴ *Ibid.*, 4-15. Also see. U.S. Army, FM 101-5-1: Operational Terms and Graphics, (Final Draft) (Washington: U.S. Government Printing Office, 15 July 1995), 1-181. "mission [statement] (JP 1-02) - 1. The form of operation, task, and purpose, which clearly indicates the

action to be taken and the reason therefore. The primary task assigned to an individual, unit, or force. It usually contains the elements of who, what, when, where, and the reason therefore, but seldom specifies how."

²⁵ Ibid., 4-17. The nine elements are: enemy courses of action; the restated mission; intent; the concept of the operation; the deception objective; priorities; the time plan; the type of order to issue; and the type of rehearsal to conduct.

²⁶ Ibid., 4-26.

²⁷ Ibid., 4-27.

²⁸ Ibid., 4-28. FM 101-5, Final Draft, actually lists a third part to course of action analysis called operational analysis and risk assessment. During academic year 94/95 at the Command and General Staff College we did not receive instruction in this aspect of course of action analysis, nor have I seen it in practice in the field. Operational analysis and risk assessment determine ways to minimize losses to soldiers and their equipment.

²⁹ Ibid., 4-29.

³⁰ Ibid., 4-32. Also see. War Department, FM 100-5: Field Service Regulations, Operations (Washington: U.S. Government Printing Office, 22 May 1941), 25. "On the basis of this analysis he then considers the relative advantages and disadvantages of his own lines of action, and selects that line of action which most promises success regardless of what the enemy may do. If two or more lines of action appear equally promising, he chooses that one which will most favor future action."

³¹ Ibid., 4-34. The commander's decision also includes the elements of who, what, when, where, how, and why. In this instance, the who may include the command and support relationships of subordinate units.

³² Ibid., 4-35. The commander's concept of the operation includes an organization of the battlefield, designation of the main effort, and how the command will defeat the enemy

³³ Ibid., H-8. The seven types of combat orders are: mission orders, operation orders, service support orders, road movement orders, overlay orders, warning orders, and fragmentary orders. The 1984 edition of FM 101-5 list five types of combat orders on page 7-2. They are: operation orders, which include movement orders; administrative/logistic orders; standing operating procedures;

warning orders; and fragmentary orders, which include mission orders.

³⁴ Department of Defense, Joint Pub 3-0: Doctrine for Joint Operations (Washington: U.S. Government Printing Office, 1 February 1995), III-1. "JFCs issue prioritized mission-type orders to subordinate commanders and define command relationships to facilitate mission accomplishment consistent with their concept of operations."

³⁵ U.S. Army, FM 101-5: Command and Control for Commanders and Staff, Final Draft, H-10.

³⁶ Ibid.

³⁷ Ibid., H-9. Also see FM 101-5: Staff Organizations and Operations (7-2 - 7-3) which gives the following description of mission orders: "Mission orders are a form of FRAGOs which provide experienced commanders with the essentials of an order; that is, their mission or a change to a previously issued mission. Mission orders will include the purpose of the mission and may be oral, written, or graphic; in all instances, they are brief."

³⁸ Ibid.

³⁹ U.S. Army, FM 100-5: Operations, 1993, 6-6. "Commanders issue orders to their subordinates face-to-face whenever the situation permits. In tactical units this often occurs on the ground chosen for the operation. Mission orders, which specify what the subordinate commands are to do without prescribing how they must do it, are often the best."

⁴⁰ M. Mitchell Waldrop, Complexity: The Emerging Science at the Edge of Order and Chaos (New York: Simon & Schuster, 1993), 12.

⁴¹ Ibid., 142.

⁴² James J. Schneider, "Cybershock: Cybernetic Paralysis as a New Form of Warfare" (SAMS theory paper, U.S. Army Command and General Staff College, 16 June 1995), 11.

⁴³ M. Mitchell Waldrop, Complexity: The Emerging Science at the Edge of Order and Chaos, 178.

⁴⁴ Ibid., 179.

⁴⁵ Ibid., 180.

⁴⁶ Peter M. Senge, The Fifth Discipline: The Art & Practice of the Learning Organization, 8.

⁴⁷ Ibid., 42.

⁴⁸ William F. Crain, "The Mission: The Dilemma of Specified Task and Implied Commander's Intent" (SAMS Monograph, U.S. Army Command and General Staff College, 1989), 38. "The U.S. Army's experience at the NTC indicates there is a problem with intent communication and effective execution. This problem appears to be the result of several factors. First, units frequently use incomplete mission statements. The statements exclude either the mission essential task or the purpose for this task. Second, commander's generally lack clarity in expressing their intent. Third, there is a predominant focus on task accomplishment at the expense of purpose. Fourth, adequate intent communication significantly diminishes at the battalion and lower levels. Finally, there is a general confusion in terms which refer to an operation, task, and purpose. The symptom is ineffective execution due to a misunderstanding of what is expected."

⁴⁹ John R. Boyd, "Organic Design for Command and Control", [Photostat] Lecture notes in my possession, May 1987, 18.

⁵⁰ D.W. Skinner, "Airland Battle Doctrine" Final Report, Center for Naval Analysis, Alexandria, VA, 1988, 16.

⁵¹ John R. Boyd, "Organic Design for Command and Control", 13.

⁵² Ibid., 16.

⁵³ Ibid., 21.

⁵⁴ Ibid., 23.

⁵⁵ U.S. Army, FM 101-5: Command and Control for Commanders and Staff, Final Draft, 4-11.

⁵⁶ Ibid., 4-34.

⁵⁷ Ibid., 1-9. I believe commander's intent is an explicit internal arrangement of the tactical decision making process since it is a synthesis of the superior commanders' intent and the commander's own vision for the operation predicated on mission analysis.

⁵⁸ John R. Boyd, "Patterns of Conflict", [Photostat] Unpublished lecture notes in my possession, December 1986, 118.

⁵⁹ William E. DePuy, Selected Papers of General William E. DePuy, 417. "Although the corps commander could not direct the various platoons toward their objectives, he is content to know that their actions will derive from his concept as it cascades down through his command and as each commander, in turn, embraces and articulates that concept in one of his own, which is adapted to the unique circumstances in his zone or sector. The concepts are nested like

mixing bowls in a kitchen. Each must fit within the confines of the larger and accommodate the next smaller and so on down to the squad, the tank, and the brave soldier himself, who eventually executes the corps commander's concept. The soldier has not, of course, ever met the corps commander. Not only is the system of nested concepts the only method by which a large force can adapt to the infinite variety of situations that arise throughout its huge area of operations, but it is also the only method by which the talent and initiative of commanders and troops at every level can be engaged and exploited."

⁶⁰ U.S. Army, FM 101-5: Command and Control for Commanders and Staff, Final Draft, 4-11. "Step 1 in mission analysis is for the commander to gain a thorough understanding of the mission..."

⁶¹ John R. Searle, The Construction of Social Reality (New York: The Free Press, 1995), 24 - 25.

⁶² Ibid., 26. Interestingly, "Commander's Intent", White Paper, illustrates a commander's intent statement on page 2. The example is from then LTG Franks, Commander, VII Corps during Operation Desert Storm. His intent statement begins, "I intend..."

⁶³ William E. DePuy, Selected Papers of General William E. DePuy, 317.

⁶⁴ Ibid. General DePuy uses the term to discuss functional systems as they relate to the maneuver commander during the execution of operations. He does not use the term in relation to the concept of purpose.

⁶⁵ Ibid., 417. General DePuy uses the term "nested" to describe how a corps commander's concept cascades down through the echelons of command to the platoon leader.

⁶⁶ Ibid., 318.

⁶⁷ Ibid., 318.

⁶⁸ S.L.A. Marshall, Men Against Fire: The Problem of Battle Command in Future War (Gloucester, MA: Peter Smith, 1978), 68.

⁶⁹ William E. DePuy, Selected Papers of General William E. DePuy, 320.

⁷⁰ J.D. Johnson, "Mission Orders in the United States Army", 1990, 99. "The last general conclusion deals with the perception versus reality table from chapter four. It revealed that 59% of the officers participating in the survey believed they understood mission orders

well enough to use them in combat but could not demonstrate the knowledge level to support it."

⁷¹ J.F.C Fuller, The Foundations of the Science of War, 214.

⁷² War Department, FM 101-5: Staff Officers' Field Manual, The Staff and Combat Orders (Washington: U.S. Government Printing Office, 1940), 43. "Paragraph 2 contains the decision of the commander which consists of a statement of what, when, how, and where the force as a whole is to operate. The amount of detail given in this paragraph should be sufficient to indicate what is to be accomplished by the force as a whole. It includes, when appropriate, such details applicable to the entire command as are necessary to coordinate the actions of subordinate units..." Also see page 54 for a combat order check list for an attack. "2. Decision or mission, including : Formation - Objective or general direction of attack - Scheme of maneuver - Purpose."

⁷³ L.B. Clark, "Narrative Summary of Operations of 4th Armd Div in the Relief of BASTOGNE, 22-29 Dec", Relief of BASTOGNE, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS, 1.

⁷⁴ Ibid. "The Div was short 21 medium tanks when it started its move North from LORRAINE, but this statistic does not accurately reflect its materiel status. Tanks which had been issued in England in the spring of 1944 and had been in combat for five months were not being accepted by ordinance in exchange for new ones and were still operating, many of them after several major repair jobs and all with mileage records beyond all normal logistical expectation. In the swift march north from LORRAINE to the ARDENNES the 8th Tk Bn had 33 tanks drop out because of mechanical failure. Some of the division's tanks could be operated only at medium speeds, some had turrets which could be traversed only by hand. In personnel the 4th Armd was short a total of 715 men and 19 officers in the tank and infantry battalions and the cavalry squadron. The three armd inf bns averaged almost 200 men short."

⁷⁵ Ibid.

⁷⁶ Ibid. The 4th Armored Division was to attack along the ARLON-BASTOGNE road, with its left (West) flank exposed.

⁷⁷ Ibid.

⁷⁸ HQ, 4th AD, "FO#8" [Photostat] [ARLON, 211600A December 1944] After Action Report, 4th Armored Division, December 1944, Combined Arms Research Library, Fort Leavenworth, KS.

⁷⁹ Ibid.

⁸⁰ LTC Creighton W. Abrams, Commander, 37th Tank Battalion; MAJ Edward Bautz, Executive Officer, 37th Tank Battalion; CPT William Dwight, Operations Officer, 37th Tank Battalion; 2LT John A. Whitehill, Commander, Company A, 37th Tank Battalion; "Relief of BASTOGNE Pocket", interview by CPT L.B. Clark in Relief of BASTOGNE, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS, 1.

⁸¹ Ibid., 3. The 37th Tank Battalion did seize BIGONVILLE on 24 December 1944 as a part of an attack by CCR. I am inferring the reason for this attack from HQ, 4th AD, "FO#8" [Photostat] [ARLON, 211600A December 1944], paragraph c, which reads: "Res Comd follow CC'A' on Div O prepared to reinforce CC'A' or CC'B', or repel ctratk on either flank."

⁸² HQ, 4th Armored Division, "Operations Instruction Number 13" [Photostat] [242300A December 1944] After Action Report, 4th Armored Division, December 1944, Combined Arms Research Library, Fort Leavenworth, KS.

⁸³ LTC Creighton W. Abrams and others, "Relief of BASTOGNE Pocket", interview by CPT L.B. Clark in Relief of BASTOGNE, 4.

⁸⁴ HQ, 4th AD, "FO#8" [Photostat] [ARLON, 211600A December 1944], paragraph 2, which reads: "4AD atks on Corps O on D day and overcomes and destroys all en resistance encountered in z and will protect left flank of Corps. See overlay."

⁸⁵ HQ, 4th Armored Division, "Operations Instruction Number 13" [Photostat] [242300A December 1944], paragraph 6, which reads: "Res Comd upon relief by 188 and 249 Engr C Bns vic BIGONVILLE will move during night 24-25 Dec to assembly area vic NEUFCHATEAU and atk in direction of BASTOGNE early 25 Dec, destroy enemy encountered, assist adv of CC'B' and protect left flank of Div and Corps."

⁸⁶ Ibid., Paragraph 1. A 155mm howitzer battery was reinforcing the 94th Field Artillery Battalion.

⁸⁷ LTC Creighton W. Abrams and others, "Relief of BASTOGNE Pocket", interview by CPT L.B. Clark in Relief of BASTOGNE, 5.

⁸⁸ L.B. Clark, "Narrative Summary of Operations of 4th Armd Div in the Relief of BASTOGNE, 22-29 Dec", Relief of BASTOGNE, 4. "The orders for the 26th, as received from Col Blanchard, the CCR commander, were to take REMICHAMPAGNE and the high ground to the north, then turn and attack northwest across the NEUFCHATEAU - BASTOGNE highway to SIBRET." Also see page 5. "(NOTE: The fact that the division expected CCB to reach BASTOGNE first is illustrated by the sending of Maj Gen Maxwell Taylor of the 101st to CCB on 26th Dec. Source: Brig Gen Dager, CCB.)"

⁸⁹ LTC Creighton W. Abrams and others, "Relief of BASTOGNE Pocket", interview by CPT L.B. Clark in Relief of BASTOGNE, 6. The arrival of the sixteen P-47 fighters was not prearranged.

⁹⁰ Ibid., 7.

⁹¹ War Department, FM 100-5: Field Service Regulations, Operations, 24. "The commander's mission is contained in the orders which he has received. Nevertheless, a commander of a subordinate unit cannot plead absence of orders or the non-receipt of orders as an excuse for inactivity in a situation where action on his part is essential, or where a change in the situation upon which the issued orders were based renders such orders impracticable or impossible of execution. If the situation does not permit communication with the superior commander and the subordinate commander is familiar with the general plan of operations or the mission of the whole command, he should take appropriate action and report the situation as early as practicable."

⁹² LTC Creighton W. Abrams and others, "Relief of BASTOGNE Pocket", interview by CPT L.B. Clark in Relief of BASTOGNE, 10. "Strength of the companies in tanks and officers never exceeded the following figures: A, 11 Tks, 2 Os; B, 8 Tks, 1 O; C, 9 Tks, 2 Os; D, 13 Tks, 1 O. Also see. MAJ Henry Crosby, Executive Officer, 53d Armored Infantry Battalion; and LTC Georges Jacques, Commander, 53d Armored Infantry Battalion; "Description of Action Relief of BASTOGNE", interview by T/Sgt C.J. Angulo on 8 January 1945 in Relief of BASTOGNE, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS, 3. "Air reconnaissance indicated that SIBRET was strongly held. The 37th Tank Bn was down to 20 tanks, the 53rd short 230 men (150 plus 80). These factors conditioned the decision to avoid a hard fight at SIBRET."

⁹³ COL Blanchard to G-3, 4th Armored Division, 1525 hours, Serial No. 63, 26 December 1944, G-3 Journal, 4th Armored Division, After Action Report, December 1944, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS. "To OCTANE - For latest sit - ABE can push up there any time, but if he does our flank will be open. If CCB could push ahead we will go on. Decided it best to hold just where we are for that reason." This next journal entry indicates that as late as 2300 hours the CCR command post was still unaware of LTC Abrams and LTC Jacques decision to fight through to the BASTOGNE perimeter. At the CCR command post, the concern is to still protect the West flank of CCB. "Fr RC: 15 en tks atking SE fr ASSENOIS. Other tk fire recd by our trs. En elm strength unknown. Mvg SE fr MORHET. Am not mvg elm until threats disposed of vital to success CCB atk." Time in 2300 hours; Serial No. 98.

⁹⁴ MAJ Robert Parker, Commander, 94th Field Artillery Battalion, "Description of Action Relief of BASTOGNE", interview by T/Sgt C.J. Angulo on 7 January 1945, Relief of BASTOGNE, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS, 5. "All plans arranged over radio. On call of Lt. Col Abrams." Also see. MAJ E.H. Meyer, S-3, Division Artillery, "Description of Action Relief of BASTOGNE", interview by T/Sgt C.J. Angulo on 7 January 1945, Relief of BASTOGNE, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS, 1. "The plan was set up when the 94th FA called Div Arty and asked for all available artillery to fire on the town of ASSENOIS. Battalion 10 volley's were to be fired on call. No time was set. The FO with the leading elements was to call when the attacking force was ready to move on the town. The following units participated; 22nd, 253rd, 776th, 94th and 1 btry of the 177th (155 How, tractor drawn). The 22nd, 253rd, 776th, 94th were to fire battalion 10 volleys and then the battery (C), 177th would continue battering the town until told to cease."

⁹⁵ William Dwight, S-3, 37th TK BN, "Events Preceding Entry into BASTOGNE", Relief of BASTOGNE, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS, 2.

⁹⁶ MAJ E.H. Meyer, S-3, Division Artillery, "Description of Action Relief of BASTOGNE", interview by T/Sgt C.J. Angulo on 7 January 1945, Relief of BASTOGNE, 1. "Regarding results, a cub plane was over ASSENOIS during the firing and reported effective results. Shortly after firing, Div Arty received a message from Capt Cook,

acting as LO with the 37th Tank Bn from 94th FA BN who called the CP by radio requesting the notification of 101st AB that CCR was heading into BASTOGNE."

⁹⁷ LTC Creighton W. Abrams and others, "Relief of BASTOGNE Pocket", interview by CPT L.B. Clark in Relief of BASTOGNE, 9.

⁹⁸ William Dwight, S-3, 37th TK BN, "Events Preceding Entry into BASTOGNE", Relief of BASTOGNE, 3. "Due to the heavy artillery fire two tanks were unable to find their way through town. One infantry halftrack got forward into the tank column. One infantry halftrack suffered a direct hit in the town."

⁹⁹ LTC Creighton W. Abrams and others, "Relief of BASTOGNE Pocket", interview by CPT L.B. Clark in Relief of BASTOGNE, 8. "During this short but intense shoot on ASSENNOIS approximately 360 rounds of 105 and 60 rounds of 155 were fired. One round hit on a C/53 half-track on the southern edge of town, causing 3 casualties."

¹⁰⁰ William Dwight, S-3, 37th TK BN, "Events Preceding Entry into BASTOGNE", Relief of BASTOGNE, 3. "During the aforementioned break in the column, the enemy threw Teller-mines on the road in a bottle neck created by the woods. The infantry half-track hit one of these mines and was destroyed, catching fire immediately."

¹⁰¹ "G-3 Periodic Report & Overlay, HQ III Corps, 261200 to 271200 DEC 1944", Scale 1/100,000 GSGS 4416 and 4436, After Action Report - DEC 44, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS. "4 Armd Div: At 1645 CCR established physical contact with elms 101 A/B Div when CCR made contact with a company of Inf, 101 A/B Div at ASSENNOIS (VP527539) after an advance of 3 1/2 miles. At close of period CCR was strengthening its position in the vicinity of ASSENNOIS, with the intention of holding open the road into BASTOGNE."

¹⁰² LTC Creighton W. Abrams and others, "Relief of BASTOGNE Pocket", interview by CPT L.B. Clark in Relief of BASTOGNE, 10. "The 37th Tk Bn by the time it reached the BASTOGNE perimeter was extremely low on ammunition. B Co had nothing but 30 cal ammo left, which was why it took no part in the last stage of the battle. The other companies' tanks had only 5 or 6 rounds of AP 75 left."

¹⁰³ MAJ Henry Crosby, Executive Officer, 53d Armored Infantry Battalion; and LTC Georges Jacques, Commander, 53d Armored Infantry Battalion; "Description of Action Relief of BASTOGNE", interview by T/Sgt C.J. Angulo on 8 January 1945 in Relief of

BASTOGNE, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS, 4. "At ASSENOS: 223 Pws, 50 killed, 15 wounded, 6 105mm gun howitzers captured, 4 88s, 2 MK IV Tanks, 3 halftracks."

¹⁰⁴William Dwight, S-3, 37th TK BN, "Events Preceding Entry into BASTOGNE", Relief of BASTOGNE, 3. "D/37 escorted the trains of the 101st and 10th Armored into BASTOGNE. The Trains consisted of some forty (40) trucks and seventy (70) ambulances. Up to this time D/37 has covered the NW flank from the same general area it took up on the 25th." Also see. "Interview with MAJ Abrams, Asst. G-4, 4th Armored Division", Relief of BASTOGNE, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS, 2. "Lt. Billings, 101st AB, Asst G-2, 101st was in charge of the supply convoy of 200 vehicles assembled at ROSSIGNOL on the 27th. First 50 vehicles loaded with ammunition, lubricants and ration kitchen. Wounded were evacuated. Col Mestrick (G-4, 4th Armd) was in charge of coordinating relief supplies with Col Rich 101st AB (Div Qm O)."

¹⁰⁵ HQ, 4th ARMD DIV, "OVERLAY TO ACCOMPANY G-3 PERIODIC REPORT, Situation as of 271200A DEC 44 No.123", After Action Report - DEC 44, 4th Armored Division, Combined Arms Research Library, Fort Leavenworth, KS. "7. Results of Operations: a. Continued adv to N against heavy opposition consisting of AT, Arty, and SA fire. Res Comd contact friendly forces surrounded in BASTOGNE and opened route enabling supplies to be sent to 101 AB Div. b. Future Operational Plans: Continue adv to N, consolidating and widening corridor to BASTOGNE."

¹⁰⁶ Gordon R. Sullivan and James M. Dubik, "War in the Information Age", Envisioning Future Warfare (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 1995), 44.

¹⁰⁷ William E. DePuy, Selected Papers of General William E. DePuy, 419. "We do not know exactly how a concept takes form in the leader's mind. We can only assume that some mixture of urgent necessity, prior thought, strong support from an able staff, a repertoire of classic alternatives and some practice in searching and sorting combine to create a concept of operation appropriate to the occasion. We note wide individual differences in respect to the boldness of action, the innovation involved, the degree to which the commander exploits his mobility and his weapons, the cunning with

which he shapes the battle and the active or passive attitudes he engenders within his command.”

¹⁰⁸ Eliot A. Cohen and John Gooch, Military Misfortunes: The Anatomy of Failure in War (New York: The Free Press, 1990), 22.

¹⁰⁹ William E. DePuy, Selected Papers of General William E. DePuy, 423. “In World War I, the control measures for the concentration of large forces were developed and refined and are still with us - boundaries, lines of departure, phase lines and objectives....The baleful legacy of those control measures, when substituted for tactical operational concepts, is still with us. They still provide a way out for the unimaginative, risk-averse commander - a commander who simply divides his attack mission into zones and his defense mission into sectors and his objectives into goose eggs distributed equally to his subordinates, and finally Capt. Jones of A Company with a narrow zone assigned and an objective one kilometer straight ahead moves into the killing zone along side Capt. Smith of B Company, who fights his parallel battle to a similar objective - alone.”

¹¹⁰ Ibid., 424. “The commander’s concept is his supreme contribution to the prospect of victory on the battlefield whether he is at the tactical or operational level. Without a sound and dominating concept of the operation, no amount of command presence, personal flair, years of rectitude, demonstrated integrity, advanced degrees, perfectly managed assignments, warrior spirit, personal courage, weapons proficiency or troop morale can compensate. Of all the qualities we seek to imbue in our leaders, the ability to create and apply a powerful preemptive concept in the heat and pressures of battle and to propagate that central set of ideas throughout the minds of his subordinates is the heart of command.”

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